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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,239	10/21/2003	Aaron L. Hill	ST8723US	4927

22203 7590 03/28/2006

KUSNER & JAFFE
HIGHLAND PLACE SUITE 310
6151 WILSON MILLS ROAD
HIGHLAND HEIGHTS, OH 44143

EXAMINER	
JASTRZAB, KRISANNE MARIE	
ART UNIT	**PAPER NUMBER**
1744	

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/690,239	HILL ET AL.	
	Examiner	Art Unit	
	Krisanne Jastrzab	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 7-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5, 7-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-5 and 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martin et. al. WO 01/21223, in view of Childers U.S. Patent No. 5,906,794.

Martin et. al. teach a vapor decontamination system for decontaminating a defined region, the system comprising: a chamber defining a region (See Figures 1 and 2; sealed chamber 10); a generator for generating a vaporized hydrogen peroxide from a solution of hydrogen peroxide and water (See Figures 1 and 2; See page 5 – preferred that sterilant vapor is hydrogen peroxide and water vapor; liquid sterilant supply 27 and evaporator 26); a closed loop circulating system for supplying the vaporized hydrogen peroxide to the region (See Figures 1 and 2; circulating conduit 12); a destroyer within the closed loop circulating system for breaking down the vaporized hydrogen peroxide (See Figures 1 and 2; See page 5 – the hydrogen peroxide extracted from the chamber with the circulating gas is subjected to catalytic action to break the hydrogen peroxide down into water vapor and oxygen, the former being extracted from the gas before the gas is recirculated through the enclosure; deactivate sterilant 22); a bypass conduit bypassing the destroyer (See Figures 1 and 2; See page 7 – parallel branches, one of which contains means to heat the gas and means to supply a sterilant vapor or vapors to the gas, e.g. second parallel branch for bypassing deactivate sterilant 22); and a controller operable to cause vaporized hydrogen peroxide

from the generator to flow through the closed loop circulating system during pre-determined phases of operation (See page 7 – parallel branches in the circuit one of which contains means to deactivate a sterilant to be added to the carrier gas flowing through the circuit and means to dehumidify the gas and the other of which branches contains means to heat the gas and means to supply a sterilant vapor or vapors to the gas; See pages 11-12).

Childers teaches a vapor decontamination system for decontaminating a defined region, the system comprising: a chamber defining a region (See Figure 6; See col. 5, lines 45-47 – sealable chamber 10 having an inlet port 12 and an outlet port 14); a generator for generating a vaporized hydrogen peroxide from a solution of hydrogen peroxide and water (See Figure 6; See col. 5, lines 51-58 – liquid sterilant vaporizer unit 18); a closed loop circulating system for supplying the vaporized hydrogen peroxide to the region (See Figure 6; See col. 5, lines 43-50 – conduit circuit 16 fluidly connected to the chamber ports to provide a closed-loop flow path for recirculating a carrier gas into, through, and out of the chamber 10); a destroyer within the closed loop circulating system for breaking down the vaporized hydrogen peroxide (See Figure 6; See col. 5, lines 59-65 – converter 20); and a controller operable to cause vaporized hydrogen peroxide from the generator to flow through the closed loop circulating system during pre-determined phases of operation (See Figure 6; See col. 6, line 58 to col. 7, line 13 – processing unit 42).

Both references teach the recognized importance of maintaining the sterilant vapor concentration at an optimal level during sterilization flow. Childers further teaches

that excess moisture can deter the vaporization of the sterilant and has placed the air dryer in a bypass configuration to maintain optimal conditions. Martin emphasizes retaining given sterilant concentrations during given phases in the process. It would have been obvious to one of ordinary skill in the art to configure the converter/sterilant destroyer of Martin et al., in a controlled closed circuit system with a by-pass circuit, as the air dryer in Childers is, because it would provide for optimized re-cycling of the sterilant and provide accurate control of the concentration during all phases of the sterilization process.

Response to Arguments

Applicant's arguments filed 1/17/2006 have been fully considered but they are not persuasive.

Applicant argues that Martin et al., fail to teach a closed-loop configuration, however, this argument is moot in view of the proper combination of Martin and Childers, who clearly teaches a closed loop system.

Applicant also argues that the destroyer in Martin is in a parallel path configuration, not in series, this argument is also moot in view of the new, proper combination of Childers and Martin

Applicant also argues that Childers fails to teach or suggest a "destroyer" which is upstream of the generator, however, the Examiner would disagree, particularly in view of the closed loop configuration, and note that upon recirculation the destroyer is clearly upstream of the generator.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krisanne Jastrzab whose telephone number is 571-272-1279. The examiner can normally be reached on Mon.-Wed. 6:30am-4:00pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Krisanne Jastrzab
Primary Examiner
Art Unit 1744

March 17, 2006